



# ES21-MB16S2

ES21

SAFETY COMMAND DEVICES

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
ES21-MB16S2	6082622

Other models and accessories → [www.sick.com/ES21](http://www.sick.com/ES21)



### Detailed technical data

#### Features

<b>Positive action N/C contacts</b>	2
<b>N/O contacts</b>	0
<b>Actuation directions</b>	1
<b>Release type</b>	Rotary release

#### Safety-related parameters

<b>B<sub>10d</sub> parameter</b>	2.5 x 10 <sup>5</sup> switching cycles
----------------------------------	--

#### Functions

<b>Safe series connection</b>	With Flexi Loop (with diagnostics)
-------------------------------	------------------------------------

#### Interfaces

<b>Connection type</b>	Cable with male connector M12, 4-pin, A-coded
Length of cable	25 cm
Cable diameter	4.7 mm
Conductor cross section	0.34 mm <sup>2</sup>
Bend radius (with fixed installation)	> 10 x cable diameter
Bend radius (with moving cable)	> 5 x cable diameter
Cable material	PUR
Conductor material	Copper

#### Electronics - Operating data

<b>Switching principle</b>	Slow action switching element
<b>Positive action N/C contacts</b>	2
<b>N/O contacts</b>	0
<b>Usage category</b>	AC-15/DC-13 (EN 60947-5-1)
<b>Rated operating current (voltage)</b>	4 A (35 V AC) 2 A (35 V DC)
<b>Rated insulation voltage U<sub>i</sub></b>	250 V
<b>Electrical life</b>	50.000 switching cycles <sup>1)</sup>

<sup>1)</sup> At rated load.

#### Mechanics

<b>Weight</b>	45 g
---------------	------

<b>Housing material</b>	Plastic
<b>Mounting version</b>	Panel mount version
<b>Mechanical life</b>	50.000 switching cycles

#### Ambient data

<b>Enclosure rating</b>	IP65, IP67 (IEC 60529)
<b>Ambient operating temperature</b>	-25 °C ... +70 °C
<b>Storage temperature</b>	-40 °C ... +80 °C

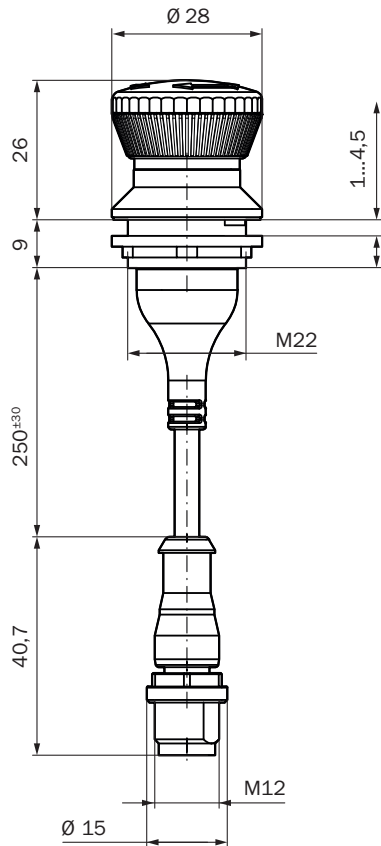
#### Classifications

<b>ECLASS 5.0</b>	27371228
<b>ECLASS 5.1.4</b>	27371228
<b>ECLASS 6.0</b>	27371244
<b>ECLASS 6.2</b>	27371244
<b>ECLASS 7.0</b>	27371244
<b>ECLASS 8.0</b>	27371244
<b>ECLASS 8.1</b>	27371244
<b>ECLASS 9.0</b>	27371244
<b>ECLASS 10.0</b>	27371244
<b>ECLASS 11.0</b>	27371244
<b>ETIM 5.0</b>	EC002034
<b>ETIM 6.0</b>	EC002034
<b>ETIM 7.0</b>	EC002034
<b>ETIM 8.0</b>	EC002034
<b>UNSPSC 16.0901</b>	39121545

#### Certificates

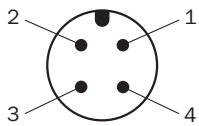
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>cULus certificate</b>	✓
<b>Third party certificate</b>	✓

Dimensional drawing



Dimensions in mm (inch)

Pinouts



Pin	Description
1 - 2	Normally closed
3 - 4	Normally closed
For details see operating instructions	

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)